

Appl. No. 09/854,382
Amdt. Dated March 18, 2004

Claim 9 (original) A fuel cell assembly as claimed in claim 8, wherein surfaces of the anode and cathode flow field plates include grooves for the elastomeric seal material that fills the grooves and penetrates the gas diffusion layers, to form a seal with the membrane.

Claim 10 (original) A fuel cell assembly as claimed in claim 9, wherein each proton exchange membrane includes a peripheral flange, and the seal material is bonded to the peripheral flanges.

def 5/24/04
Claim 11 (original) A fuel cell assembly as claimed in claim 8, 9 ^{or 10} and 10, wherein each flat, opposed face of the anode and cathode flow field plates includes flow field channels for gases.

Claim 12 (currently amended) A fuel cell assembly as claimed in claim 10, which comprises a membrane electrode assembly unit intended for assembly with similar membrane electrode assemblies units into a larger fuel cell stack, the fuel cell assembly including, at either end thereof, end surfaces adapted for mating with end surfaces of similar membrane electrode assemblies units.

Claim 13 (currently amended) A fuel cell assembly as claimed in claim 12, wherein at least one of said end surfaces is provided with a seal, for forming a seal with the end surface of another similar membrane electrode assembly unit.

Claim 14 (original) A fuel cell assembly as claimed in claim 10, wherein each of the anode and cathode flow field plates includes, at one end thereof, a first fuel aperture, a first coolant aperture and a first oxidant aperture, and at the other end thereof, a second fuel aperture, a second coolant aperture and a second oxidant aperture; wherein each of the anode and cathode flow field plates includes a first connection aperture at said one end and a second connection aperture at said other end for supply of material to form said seal.